

***Amendments to the Specification***

The paragraph numbering used in the following amendment corresponds to the paragraph numbering used in the patent publication for the above application (U.S. Publication No. 20020124036).

Please replace paragraph [0028] with the following paragraph:

[0028]     FIGs. 7A and 7B [[FIG. 7]] illustrate ~~illustrates~~ an example final layer of an FCT processing hierarchy in accordance with an aspect of the invention;

Please replace paragraph [0062] with the following paragraph:

[0062]     At this point it is important to realize that all that is required is one more level of processing to obtain correlation terms consisting of 8 components which represents a full length correlation. However, it must also be recognized that there are 16 upper 4-tuple correlations as well as 16 lower 4-tuple correlations, which if exploited for all combinations in this case would yield 256 addition operations! Fortunately the CCK code set is well defined and possesses only 64 valid 8 chip component correlations. Hence, the final layer, illustrated in FIGs. 7A and 7B [[FIG. 7]], is pruned to perform only 64 unique addition operations. Thus, a total (upper bound) number of adders used for the algorithm are:

$$16 \text{ (first hierarchical layer)} + 32 \text{ (second layer)} + 64 \text{ (third layer)} = 112$$

Please replace paragraph [0092] with the following paragraph:

[0092]     Step 808 includes grouping the results of step 806 and summing combinations of results within each group to generate one or more additional layers of results, and repeating this process until a final layer of

results includes a separate correlation output for each possible state of the complete set of coefficients ( $C_0$ - $C_{M-1}$ ). This is illustrated in FIG. 3C and FIGs. 7A and 7B [[FIG. 7]], where the summers 306 generate a second layer 310, the FCT final output trellis 702 (FIGs. 7A and 7B [[FIG. 7]]) provides separate outputs for each possible state of the complete set of coefficients ( $C_0$ - $C_{M-1}$ ) in a final layer 704.

Please replace paragraph [0093] with the following paragraph:

[0093] In an embodiment, steps 806 and 808 include the step of omitting summations that would result in invalid combinations of the encoding coefficients ( $C_0$ - $C_{M-1}$ ). This is illustrated, for example, in FIGs. 7A and 7B [[FIG. 7]], wherein the second level of results 310 omits the following combinations: